

ABSTRACT OF THE DISCLOSURE

[0068] A method of making electrically conductive bumps of improved height on a semiconductor device. The method includes steps of depositing an under bump metallurgy over a semiconductor device onto a contact pad; depositing and patterning a photoresist layer to provide an opening over the under bump metallurgy; depositing a first electrically conductive material into the opening in the photoresist layer; depositing a second electrically conductive material over the first electrically conductive material; removing the photoresist layer and the excess under bump metallurgy; applying a flux agent to the top surface of the second electrically conductive material; hard baking the semiconductor device to remove any oxide; dipping a portion of the semiconductor device in an electroless plating solution; removing the semiconductor device from the electroless plating solution; and reflowing the electrically conductive materials to provide a bump of improved height on the semiconductor device.